

CLAIMS

Ref A1
We claim:

1. A machine for cutting and feeding sheet material comprising:
a frame, said frame being generally rectangular;
a paper cutting and delivering means comprising:
a material feeding roller means mounted to said frame, said feeding roller means adapted to a hold a roll of paper;
a motor means adapted to rotate a draw roller assembly, wherein said draw roller assembly being adapted to draw said paper from said paper roll;
a cutting means, said cutting means being mounted adjacent to said draw roller, said cutting means comprising a latitudinal perforating bar adapted to perforate said paper along a width of said paper, and a latitudinal cutting bar adapted to cut said paper along said width of said paper;
a guide roller assembly comprised of four rollers and two guides orientated to feed said paper from said paper cutter to an exit in said frame; and
an actuating means operationally coupled to said cutting means and to said motor means.

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2. The machine for cutting and feeding sheet material as stated in claim 2, wherein said frame has an inside portion and an outside portion whereby said material feeding roller means is mounted to said frame on said outside of said frame.

3. The machine for cutting and feeding sheet material as stated in claim 2, wherein said draw roller assembly further comprises:

a first pair of rollers, a tension roller and a second pair of rollers, said tension roller having a spring attached thereto adapted to apply downward tension on said tension roller wherein said second pair of rollers being rotated by said motor means.

4. The machine for cutting and feeding sheet material as stated in claim 3, further comprising a sensor, wherein said sensor measures a length of said paper, said sensor being between said motor means and said second pair of roller wherein said sensor being adapted to rotate said second pair of rollers.

Sub C 37
5. The machine for cutting and feeding sheet material as stated in claim 4, wherein said cutting means further comprises a longitudinal perforating wheel, wherein said perforating wheel perforates said paper along a length of said paper.

Sub A 2 > C4
6. The machine for cutting and feeding sheet material as stated in claim 5, further comprising:

a paper holder being mounted in said frame, said paper holder being between said cutting means and said guide roller assembly;

a second guide roller assembly mounted between said cutting means and said paper holder, said second guide roller assembly comprising two rollers and two guide bars adapted to direct said paper into said paper holder.

7. The machine for cutting and feeding sheet material as stated in claim 6, wherein said frame further contain a second and a third paper cutting and delivery means being substantially identical as said first paper cutting and delivery means, said second means being mounted below said first means, said third means being mounted below said second means whereby all three cutting and delivery means are mounted parallel to each other and all direct paper from a first end of said frame to a second end of said frame.

8. The machine for cutting and feeding sheet material as stated in claim 7, wherein said first paper cutting and delivery means is adapted to hold paper of a different width than said second and third paper cutting and delivering means, said second paper cutting and delivery means being adapted to hold paper of a different width than said third paper cutting and feeding means.

Sub A3 9. The machine for cutting and feeding sheet material as stated in claim 8, and further comprising an actuating means operationally coupled to each of said cutting means and to each of said motor means, said actuating means being adapted to be programmable for variable cutting and perforating patterns.

Sub C6 10. The machine for cutting and feeding sheet material as stated in claim 9 wherein said paper holders being slidably

mounting into said frame wherein said paper holders can be accessed by pulling said paper holders from said frame.

Sub A *B3* 11. A machine for cutting and feeding sheet material comprising:

a frame, said frame being generally rectangular wherein said frame has an inside portion and an outside portion;

a paper cutting and delivering means comprising:

a material feeding roller means wherein said roller means is attached to the outside portion of said frame, said feeding roller means being adapted to feed a continuous roll of paper into said frame such that said paper is horizontal to a floor;

a pressing means mounted to said inside of said frame wherein said pressing means flattens said paper, said pressing means being adjacent to said feeding means, said pressing means being comprised of a first draw roller assembly, a tension roller and a second draw roller assembly, said tension roller having a spring attached thereto adapted to apply downward tension on said tension roller, said first and said second draw roller assemblies being comprised of two rollers, said second draw roller being in fluid connection with a sensor whereby said sensor rotates said second draw roller to pull said paper into

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said frame wherein said sensor measures a length of said paper;

a motor means rotationally coupled to said sensor means, motor means adapted to rotate said sensor means;

a cutting means, said cutting means being mounted adjacent to said second draw roller, said cutting means comprising a longitudinal perforating wheel, a latitudinal perforating bar, and a latitudinal cutting bar, said perforating wheel perforates said paper along a length of said paper, said latitudinal perforating bar perforates said paper along a width of said paper, said latitudinal cutting bar cuts said paper along said width of said paper;

a paper holder mounted in said frame;

a first guide roller assembly mounted between said cutting means and said paper holder, said first guide roller assembly comprising two rollers and two guide bars adapted to direct said paper into said paper holder;

a second guide roller assembly comprised of four rollers and guides adapted to feed said paper from said paper holder to an exit in said frame;

said exit in said frame comprising two rollers and an opening in said frame; and

an actuating means operationally coupled to said cutting means and to said motor means, said

actuating means being adapted to be programmable for variable cutting and perforating patterns.

12. A machine for cutting and feeding sheet material comprising:

a frame, said frame being generally rectangular wherein said frame has an inside portion and an outside portion, said frame supporting a first, second and third paper cutting and delivering means;

said first paper cutting and delivering means comprising:

a material feeding roller means wherein said roller means is attached to the outside portion of said frame, said feeding roller means being adapted to feed a continuous roll of paper into said frame such that said paper is horizontal to a floor;

a pressing means mounted to said inside of said frame wherein said pressing means being adapted to flatten said paper, said pressing means being adjacent to said feeding means, said pressing means being comprised of a first draw roller assembly, a tension roller and a second draw roller assembly, said tension roller having a spring attached thereto adapted to apply downward tension on said tension roller, said first and said second draw roller assemblies being

comprised of two rollers, said second draw roller being in fluid connection with a sensor whereby said sensor rotates said second draw roller to pull said paper into said frame, said sensor being adapted to measure a length of said paper;

a motor means rotationally coupled to said sensor means, motor means adapted to rotate said sensor means;

a cutting means, said cutting means being mounted adjacent to said second draw roller, said cutting means comprising a longitudinal perforating wheel adapted to perforate said paper along a length of said paper, a latitudinal perforating bar adapted to perforate said paper along a width of said paper, and a latitudinal cutting bar adapted to cut said paper along said width of said paper;

a paper holder mounted in said frame, said paper holder being slidably mounting into said frame wherein said paper holder can be accessed by pulling said paper holder from said frame;

a first guide roller assembly mounted between said cutting means and said paper holder, said first guide roller assembly comprising two rollers and two guide bars adapted to direct said paper into said paper holder;

a second guide roller assembly comprised of four rollers and guides adapted to feed said paper from said paper holder to an exit in said frame;

said second and said third paper cutting and delivery means being substantially identical as said first paper cutting and delivery means, said second means being mounted below said first means, said third means being mounted below said second means whereby all three cutting and delivery means are mounted parallel to each other and all direct paper from a first end of said frame to a second end of said frame, a paper holder of said second means being larger than said paper holder of said first means, a paper holder of said third means being larger than said paper holder of said second means;

said exit in said frame comprising two rollers and an opening in said frame, said exit adapted to receive paper from each of said cutting and delivery means; and

an actuating means operationally coupled to said each of said cutting means and to each of said motor means, said actuating means being adapted to be programmable for variable cutting and perforating patterns.

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